

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 – 7 (Cancelled).

8. (Currently Amended) A method of initialization for a multitone system operating in a spectrum having an lower part and an upper part~~using a hybrid time division duplex (TDD) and frequency division duplex (FDD) system with a hyperframe structure,~~ comprising:

using a hybrid time division duplex (TDD) in the lower part of the spectrum;

using a frequency division duplex (FDD) system in the upper part of the spectrum;

comparing a first direction and a second direction data rates for a two-band duplex to threshold data rates; and

when said data rates fail to meet said threshold data rates, comparing data rates for a hybrid duplex to said threshold data rates, ~~wherein said~~

hybrid duplexing uses by encoding a hyperframes with structure comprising:

wherein a first set of symbols are a plurality of type 1 symbols, for transmission in said first direction in a first set of subchannels and transmission in said second direction in a second set of subchannels where said first and said second directions differ and said first set of subchannels and second sets of subchannels are different;

wherein a second set of symbols are a plurality of type 2 symbols, where transmission is only in the first direction in the first set of subchannels; and

wherein a third set of symbols are a plurality of type 3 symbols,
where transmission is only in the first direction in
subchannels different from that of the set of subchannels
used for type 2 symbols.

9 - 13 (Cancelled).

14. (Currently Amended). A method of initializing a discrete multitone system ~~with a hyperframe in a communication circuitry including a signal processor~~, comprising:

determining ~~the~~ an allowed set of power spectral density (PSD) masks for
a first direction and a second directions of a type 1, type 2 and type
3 symbols;

determining a target data rate for the first direction and the second
directions;

including type 1 and type 3 symbols in the signal-to noise (SNR)
measurement phase;

performing a bit loading for the type 1, type 2 and type 3 symbols to
determine the data rates supported in the first direction and the
second directions for each type of symbol; and

~~signal processor~~ hybrid duplexing by encoding the hyperframe, said encoding
comprising:

choosing all type 1 symbols if the type 1 symbol is able to meet the target
data rates for the first direction and the second direction; and

choosing a mix of type 1, type 2 and type 3 symbols to most closely meet
the target data rates for the first direction and the second directions
if all type 1 symbols are unable to meet the target data rate.

15. (Previously Presented) The method of claim 8, wherein the first direction is downstream, from a central office, and the second direction is upstream, to the central office.